

IN THE SPECIFICATION:

Please amend the Title page of the Specification by
revising the Title to read as follows:

~~--Method For Fermentative Production of Amino Acids and
Amino Acid Derivatives of the Phosphoglycerate Family~~

A MICROORGANISM STRAIN TRANSFORMED WITH THE *Escherichia*

coli yfiK GENE FOR THE PRODUCTION OF AMINO ACIDS.--

Please amend pages 17 and 18 of the present Specification by rewriting the paragraph bridging pages 17 to 18 to read as follows:

--The resulting DNA fragment was digested by the restriction enzymes AsnI and PacI, purified with the aid of agarose gel electrophoresis and isolated (~~Qiaquick~~ QIAQUICK® Gel Extraction Kit, Qiagen, Hilden, D). QIAQUICK® is a trademark for a product being a DNA extraction kit. Cloning was carried out by way of ligation with an NdeI/PacI-cut vector pACYC184-cysEX-GAPDH which has been described in detail in EP0885962A1. This vector contains a cysEX gene coding for a serine acetyl transferase with reduced feedback inhibition by L-cysteine and, 3' thereof, the constitutive GAPDH promoter of the gapA gene. Said procedure places the yfiK gene downstream of the GAPDH promoter in such a way that transcription can be initiated therefrom. The resulting vector is referred to as pG13 and is depicted in FIG. 1 in the form of an overview drawing. Verification of the construct was followed by transforming *Escherichia coli* strain W3110 and selecting appropriate transformants using tetracycline. The bacteria strain *Escherichia coli*

W3110/pG13 was deposited with the DSMZ (Deutsche Sammlung für Mikroorganismen und Zellkulturen GmbH, D-38142 Braunschweig) under the number DSM 15095 in accordance with the Budapest Treaty, and is utilized in the examples below as producer strain for producing amino acids of the phosphoglycerate family. The comparative strain chosen for demonstrating the effect of increased expression of the yfiK gene was W3110/pACYC184-cysEX which is likewise described in detail in EP0885962A1 but which contains, in contrast to pG13, no GAPDH promoter-yfiK sequence.--

Please amend pages 19 and 20 of the present Specification by rewriting the paragraph bridging pages 19 and 20 to read as follows:

--The fermenter used was a ~~Biostat~~ BIOSTAT® M instrument from Braun Biotech (Melsungen, D), which has a maximum culture volume of 2 l. BIOSTAT® is a trademark for a product being a fermenter. The fermenter containing 900 ml of SM1 medium supplemented with 15 g/l glucose, 0.1 g/l tryptone, 0.05 g/l yeast extract, 0.5 mg/l vitamin B₁ and 15 mg/l

tetracycline was inoculated with the preculture described in example 2 (optical density at 600 nm: approx. 3). During fermentation, the temperature was adjusted to 32°C and the pH was kept constant at 6.0 by metering in 25% ammonia. The culture was gassed with sterilized compressed air at 1.5 vol/vol/min and stirred at a rotational speed of 200 rpm. After oxygen saturation had decreased to a value of 50%, the rotational speed was increased to up to 1 200 rpm via a control device in order to maintain 50% oxygen saturation (determined by a pO₂ probe calibrated to 100% saturation at 900 rpm). As soon as the glucose content in the fermenter had fallen from initially 15 g/l to approx. 5-10 g/l, a 56% glucose solution was metered in, feeding took place at a flow rate of 6-12 ml/h and the glucose concentration in the fermenter was kept constant between 0.5 - 10 g/l. Glucose was determined using the glucose analyzer from YSI (Yellow Springs, Ohio, USA). The fermentation time was 28 hours, after which samples were taken and the cells were removed from the culture medium by centrifugation. The resulting culture supernatants were analyzed by reversed phase HPLC on a LUNA® 5 µ C18(2) column (Phenomenex, Aschaffenburg,

Germany) at a flow rate of 0.5 ml/min. LUNA® is a trademark for a product being an HPLC-column. The eluent used was diluted phosphoric acid (0.1 ml of conc. phosphoric acid/l). Table 1 shows the contents obtained of the major metabolic product in the culture supernatant. Said products are O-acetyl-L-serine and N-acetyl-L-serine which is increasingly produced by isomerization from O-acetyl-L-serine under neutral to alkaline conditions. --